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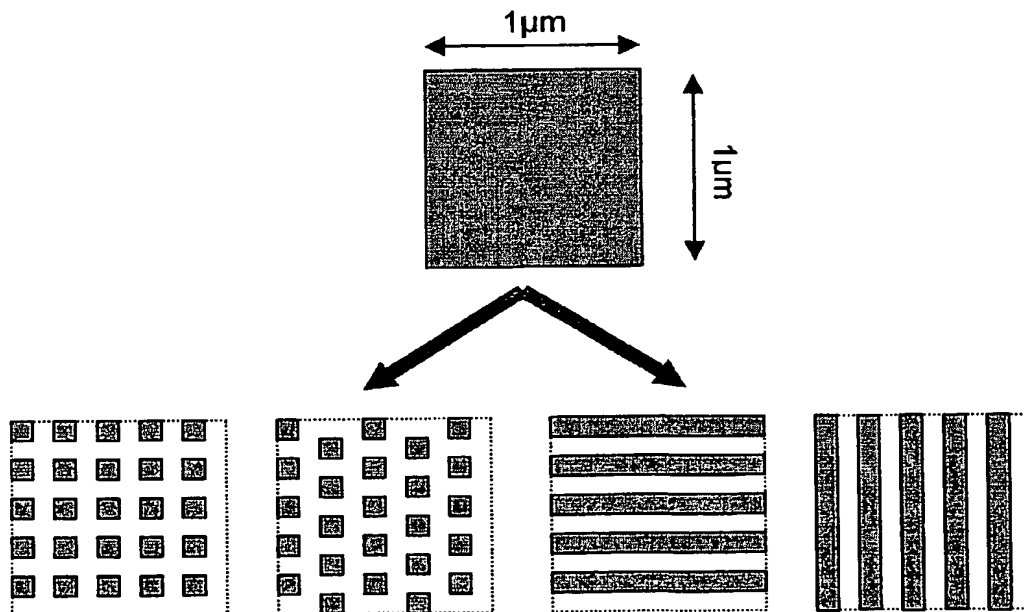
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[Continued on next page]

(54) Title: **OVERLAY METROLOGY MARK**



(57) Abstract: An overlay metrology mark for determining the relative position between two or more layers of an integrated circuit structure comprising a first mark portion associated with and in particular developed on a first layer and a second mark portion associated with and in particular developed on the surface of a second layer, wherein each mark portion comprises a single two dimensional generally orthogonal array of individual test structures. A method of marking and a method of determining overlay error are also described.



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ML, MR, NE, SN, TD, TG).

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# INTERNATIONAL SEARCH REPORT

GB2004/001533

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L23/544

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L G03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 02/19415 A (KLA TENCOR CORP)  7 March 2002 (2002-03-07)  page 1, lines 9-23  page 2, lines 23-26  page 7, lines 1-4  page 11, line 12 - page 12, line 10  page 23, line 4 - page 24, line 7  page 25, line 24 - page 26, line 3  page 30, line 32 - page 32, line 8; figure 8  page 46, line 16 - page 47, line 29;  figure 19  page 50, lines 7-20  page 56, line 26 - page 57, line 2</p> <p style="text-align: center;">----- -/-</p>	<p>1-12,  15-22</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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GB2004/001533

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	"INTERFEROMETRIC METHOD OF CHECKING THE OVERLAY ACCURACY IN PHOTOLITHO-GRAPHIC EXPOSURE PROCESSES" IBM TECHNICAL DISCLOSURE BULLETIN, IBM CORP. NEW YORK, US, vol. 32, no. 10B, March 1990 (1990-03), pages 214-217, XP000097868 ISSN: 0018-8689 page 214 - page 217; figure 1	1-4,6-9, 13,17-22
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